

Rebooting NYC: An Urban Tech Agenda for the Next Administration

Summary of Recommendations | January 2022

Written by Rohit T. Aggarwala, Michael E. Bloomberg, Victoria M. Woo, Sarah Goodyear, Rebecca Lassman, Adrian Silver, Phillip D. Ellison, Matt Stempeck, Conor Lyman, Preksha Agarwal, Andrew Salzberg, Linda Jaber, and Michael M. Samuelian



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Recommendations	Rationale	Initiatives	Responsibility
1. Foundations: Privacy and administration			
1.1 Enact a law regulating how City agencies and private entities gather and share data from the public realm	<i>Because City agencies have significant leeway in how they use data collected in the public realm, many New Yorkers are concerned that more data-gathering will lead to violations of privacy</i>	Enact rules that govern how City agencies use and share data, with the objective of facilitating data use and sharing that conforms to the principles of contextual integrity	City Council
		Establish an oversight process for agencies that seek to deploy new data-gathering capabilities or combine datasets in new ways	City Council, Public Advocate
		Enact transparency requirements for how private entities gather, share, and use data collected in the public realm, and limits on how they may use or sell data collected without consent	City Council
1.2 Make the City an effective purchaser, developer, and manager of technology projects	<i>The City is not as well organized or staffed as it should be to purchase and manage technology well</i>	Appoint a Deputy Mayor of Technology to manage all of the City's technology systems and policies, while focusing DoITT on the core task of providing the City's IT systems	Mayor, City Council
		Have the New York City Comptroller conduct a regular broad inventory and audit of the City's technology infrastructure and investments	Mayor, Comptroller
		Create a New York City Digital Service to inject new technology talent into City government	Mayor, City Council
		Use these additional staff to shift to a co-development model of working with vendors	Mayor
2. Technology equity: Include everyone in the digital economy			
2.1 Create a Broadband Development Corporation to bring the internet to all New Yorkers	<i>Too many New Yorkers lack access to broadband internet</i>	Establish a Broadband Development Corporation tasked with the creation of a citywide open-access fiber network and utility corridor network	Mayor, City Council
		Assert a City role in ensuring building access	Mayor, City Council
		Ensure the BDC can coordinate the activities of other city agencies	Mayor
		Ensure that Empire City Subway is executing its franchise in the best interests of the City	Comptroller, Mayor
		Institute two approaches to gather data on broadband access: annual reporting from building owners, and inclusion of broadband questions in the Housing and Vacancy Survey	City Council, Mayor
		Use the Public Engagement Unit to address digital inclusion in a strategic, data-based way	Mayor

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3. Optimized systems: Use technology to improve the management of our built environment			
3.1 Bring safety and order to our streets through digital management and enforcement	<i>Our streets and curbs are too dangerous and disorderly because traditional management and enforcement practices are ineffective</i>	Build out a complete network of enforcement cameras immediately, and use them to the fullest extent of City authority	Mayor
		Obtain State legislative authority to use technology to enforce all traffic violations	Mayor, City Council
		Explore ways to ensure that low-income violators are not unduly burdened by fines	Mayor
		Ensure that camera-enforcement systems operate fairly and transparently	Mayor (DOT)
		Implement a curbside management system allowing parking reservations	Mayor, City Council
		Explore requiring speed limiters on TLC-licensed vehicles	Mayor (TLC)
3.2 Convert and expand bike lanes into a network that accommodates a variety of new mobility vehicles	<i>Many new urban-friendly vehicle technologies are emerging, but these have no place to travel on NYC streets</i>	Redesign NYC bike lanes to be wider New Mobility Lanes, and build out the network	Mayor (DOT)
		Obtain State legislation allowing New York City to determine what vehicles are allowed in the New Mobility Lanes	Mayor, City Council
		Establish vehicle standards for use of the New Mobility Lanes	Mayor (DOT)
		Institute comprehensive enforcement for New Mobility Lanes	Mayor (DOT)
3.3 Require mobility companies to offer transparent, real-time pricing and payment options	<i>New Yorkers rely on taxi and for-hire vehicles more than people do anywhere else in the United States, but there is currently no way for them to know if they are getting the best price for the trips they need to take</i>	Require open data feeds and payment APIs for taxi and ride-hail operators	Mayor (TLC)
		Require open payment APIs for bike share and shared scooter systems	Mayor (DOT)
		Require open-payment APIs for public transportation systems, starting with the NYC Ferry	Mayor (EDC)
3.4 Propel New York City's design and construction industry into the digital age by moving to automated code review	<i>NYC's design and construction industry does not use technology as much as it could, and too few permit applications are reviewed in detail by the City</i>	Enact into law a date certain by which all permit applications will need to be submitted in a new standard BIM format	Mayor (DOB), City Council
		Launch a working group to develop a set of universal standards and application programming interfaces (APIs) for BIM files that DOB will accept	Mayor (DOB)
		Begin to translate New York City's codes from legal text into computable, machine-readable logic	Mayor (DOB)
		Start an effort to train the entire AEC industry on BIM	Mayor (DOB)
3.5 Reduce the number of sidewalk sheds by thoroughly testing how drones can evaluate the safety of building facades	<i>Drones have the potential to conduct facade inspections and thus reduce the prevalence of sidewalk sheds, but evaluating their potential fully will require a rigorous evaluation including the consideration of new approaches to meeting inspection requirements</i>	Issue a Request for Information to see what the private sector proposes as a drone-based solution to facade inspection requirements	Mayor (DOB)
		Conduct a thorough side-by-side test of human and drone-based inspections using a sizable sample of buildings up for facade inspection in 2023	Mayor (DOB)
		Based on the results, incorporate these results into a revised approach to facade inspection starting in 2025	Mayor (DOB), City Council

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3.6 Improve sanitation efficiency by upgrading waste management technology	<i>NYC's waste technology has fundamentally not evolved since the 1970s, and that has led to unsightly streets and sidewalks, vermin infestations, environmental pollution, and unsafe conditions for sanitation workers</i>	Establish a long-term goal for the City for on-site anaerobic digestion	Mayor (DSNY)
		Develop a plan for citywide containerization of waste and semi-automated collection	Mayor (DSNY)
		Initiate the process to integrate sensors in containers to enable dynamic routing	Mayor (DSNY)
		Fully explore technology as part of the planning for the new Solid Waste Management Plan	Mayor (DSNY)
3.7 Accelerate renewable energy adoption in the City by promoting battery energy storage	<i>Aggressive climate goals at the City and State level - include goals specifically for energy storage - combined with an updated fire code to permit indoor battery storage will transform the City's electric grid and accelerate the transition to a cleaner, more equitable grid</i>	Develop a streamlined permitting and approval process for storage	Mayor (FDNY, DOB)
		Undertake an aggressive effort to encourage battery storage projects where they are needed most	Mayor
		Fully integrate battery storage into the City-led building decarbonization programs and policies	Mayor

Always open: Make it easier to engage with the City

4.1 Make it easier for New Yorkers to obtain social services through the creation of a data locker and interagency verifications	<i>Applying for benefits is difficult, and requires significant documentation that is often already held by a different City agency</i>	Create secure and easy-to-use personal data lockers to store eligibility-related documentation	Mayor
		Streamline benefits applications across City agencies, beginning with the user interface of online applications	Mayor
		Add a feature to ACCESS NYC that allows New Yorkers to keep track of their City programs and when they need to reapply	Mayor
4.2 Make Community Boards more representative by holding hybrid and virtual meetings, using digital tools to broaden their reach and expand access	<i>In-person Community Board meetings are often unrepresentative because meetings are difficult to attend in person; technology offers ways to broaden participation and accessibility</i>	Advocate for Albany to amend the Open Meetings Law to allow continued virtual and hybrid public meetings after the pandemic	Mayor, City Council
		Provide Community Boards with user-friendly, standardized webcasting kits	Mayor, Borough Presidents
		Use 2022 as an experimental period in which to iterate and refine best practices	Mayor, Borough Presidents
		Upgrade meetings with automatic transcriptions, captions, and translation to improve accessibility	Mayor, Borough Presidents
		Create an interest-based alerts service for New Yorkers	Mayor, Borough Presidents
Facilitate and broaden opportunities for community input	Mayor, Borough Presidents		

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Futureproofing: Position NYC to shape the urban technology of the future			
5.1 Develop rules that shape and encourage emerging technologies in advance of their arrival	<i>New technology and tech-driven business models have often caught New York City without an effective regulatory regime that can both protect the public's interest while also encouraging fast adoption</i>	Commission one or more external entities to lead a fast process to make regulatory proposals for new technologies that are already entering use in New York City or elsewhere	Mayor
		Create a permanent, independent Emerging Technology Advisory Panel to issue biennial reports to the City on emerging technologies and their implications	City Council

Recommendations	Rationale
Additional concepts under consideration	
Evaluating and regulating police technology	<i>Many New Yorkers are concerned that NYPD's surveillance technology has evolved without sufficient oversight</i>
Electronic payments	<i>Too many New Yorkers do not have a bank account and thus cannot participate in online transactions</i>
Package delivery	<i>Too many New Yorkers have difficulty receiving deliveries</i>
Electrifying buildings to reduce carbon emissions	<i>New technologies will make NYC's buildings greener, but many buildings do not have the electrical capacity to accommodate new equipment</i>
Illegal dumping	<i>Illegal dumping poses an environmental threat to the residents of certain neighborhoods, as well as physical a threat to sanitation workers</i>
Government accountability	<i>The Mayor's Management Report could be updated to make use of new forms of data</i>
Multichannel interaction with the City	<i>311 and nyc.gov could be updated and integrated</i>
Digitizing democracy	<i>Technology should broaden democratic participation</i>

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Read the full report at cornelltech.io/RebootingNYC